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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/698,196	10/30/2003	Michael Harville	200313240-1	3553	
22879 HEWLETT PA	7590 11/08/200 CKARD COMPANY	EXAMINER			
P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			BURGESS, BARBARA N		
			ART UNIT	PAPER NUMBER	
			2157		
			MAIL DATE	DELIVERY MODE	
			11/08/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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		Application	on No.	Applicant(s)			
Office Action Summary		10/698,19	96	HARVILLE ET AL.			
		Examiner	,	Art Unit			
	•	Barbara N	`	2157			
Period fo	The MAILING DATE of this communica or Reply	tion appears on the	cover sheet with	the correspondence address	S		
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAIL nsions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this communication of the provision of the previous of the provision of the previous of the previ	LING DATE OF TH 37 CFR 1.136(a). In no ev cation. ory period will apply and w , by statute, cause the app	HIS COMMUNICA ent, however, may a reply ill expire SIX (6) MONTH dication to become ABAN	ATION. y be timely filed IS from the mailing date of this community IDONED (35 U.S.C. § 133).	•		
Status							
1)⊠	Responsive to communication(s) filed of	on <u>22 March 2004</u> .					
2a)	This action is FINAL . 2b)⊠ This action is non-final.						
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice	under <i>Ex parte Qเ</i>	<i>iayle</i> , 1935 C.D. 1	11, 453 O.G. 213.			
Disposit	ion of Claims						
4)⊠	Claim(s) 1 and 38-76 is/are pending in	the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)	Claim(s) is/are allowed.						
6)⊠)⊠ Claim(s) <u>1, 38-76</u> is/are rejected.						
· <u></u>	Claim(s) is/are objected to.						
8)[Claim(s) are subject to restriction	n and/or election r	equirement.				
Applicat	ion Papers						
9)[The specification is objected to by the E	Examiner.					
10)⊠	The drawing(s) filed on 02 February 200	<u>04</u> is/are: a)⊠ acc	cepted or b) 🗌 ob	jected to by the Examiner.			
	Applicant may not request that any objectio	on to the drawing(s) t	e held in abeyance	e. See 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)	The oath or declaration is objected to by	y the Examiner. No	ote the attached C	Office Action or form PTO-15	52.		
Priority (under 35 U.S.C. § 119						
12)	Acknowledgment is made of a claim for	foreign priority un	der 35 U.S.C. § 1	19(a)-(d) or (f).			
a)	☐ All b)☐ Some * c)☐ None of:			•			
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of t	, ,		ceived in this National Stag	je		
	application from the International	•					
* See the attached detailed Office action for a list of the certified copies not received.							
Attachmen	t(e)		•				
	ce of References Cited (PTO-892)		4) Interview Sum	nmary (PTO-413)			
2) Notice	ce of Draftsperson's Patent Drawing Review (PTO	-948)	Paper No(s)/N	Mail Date			
	mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date <u>2-5-04, 3-8-05, 10-16-07</u> .		6) Other:	rmal Patent Application			

Office Action Summary

DETAILED ACTION

Information Disclosure Statement

The information disclosure statements (IDS) submitted on February 5, 2004,
 March 8, 2005, and October 16, 2007are in compliance with the provisions of 37
 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1, 38-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Menditto et al. (hereinafter "Menditto", US Patent 6,981,029 B1) in view of Hospodor (US Patent Application Publication 2003/0021282 A1).

As per claim 1, Menditto discloses a method for managing service, said method comprising:

 receiving a request for a service from a client, said service comprising a service component (col. 4, lines 28-40, Menditto discloses a client terminal requesting content from a server in which the request includes the type of content with a ipeg component to service the request);

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selecting a service location manager (i.e. content gateway) to which to provide
said request from a plurality of service location managers (col. 3, lines 11-17 and
lines 40-61, Menditto discloses a content gateway that locates the best server to
service the content request from the client terminal); and

selecting a service provider (i.e. content provider) to which to assign said service component from a plurality of service providers of a network, wherein said selecting said service provider is performed by said service location manager (col. 3, lines 62-67, col. 4, lines 1-17, Menditto discloses the content gateway selecting from content delivery nodes or content provider servers that is close to client terminal to service the request).

Although the system disclosed substantial features of the claimed invention, it does not explicitly disclose:

- a streaming media service; and
- informing said service provider of said assignment to perform said media service component, causing said service provider to prepare to perform said streaming media service on streaming media.

Hospodor discloses a system for servicing streaming media request comprising:

- a streaming media service (paragraphs 0012, 0014 and 0026, Hospodor discloses receiving a streaming media request); and
- informing said service provider (i.e. stream engine node) of said assignment to perform said media service component, causing said service provider (i.e. stream engine node) to prepare to perform said streaming media service on

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streaming media (paragraphs 0026-0028 and 0036, Hospodor discloses a stream director node that assigns a stream engine node to service the streaming media request from the client).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Menditto by incorporating or implementing servicing and assigning streaming media requests to a particular service provider (i.e. stream engine node) for the purpose of providing streaming content to a requestor while meeting quality of service constraints [paragraph 0003].

As per claim **38**, Menditto discloses wherein said selecting said service location manager comprises:

- maintaining a record comprising identifying information of a service location
 manager among said plurality of service location managers (col. 11, lines 57-58
 and col. 12, lines 3-17, Menditto discloses a directory within the content gateway
 which contains the address of servers that are capable of servicing the client
 request); and
- selecting said service location manager according to said record (col. 11, lines
 57-67, Menditto discloses selecting a server that best satisfy the client request).

As per claim **39**, Menditto discloses wherein said selecting said service location manager comprises:

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maintaining a record comprising a prioritized list of at least one service location
manager among said plurality of service location managers (col. 11, lines 57-58
and col. 12, lines 3-17, Menditto discloses a directory within the content gateway
which contains a list of server addresses that are capable of servicing the client
request); and

 selecting said service location manager according to the order of priority of said list of said record (col. 11, lines 57-67, Menditto discloses selecting a server that best satisfy the client request).

As per claim **40**, Menditto discloses wherein said selecting said service location manager comprises:

- maintaining a record comprising identifying information for a set of service location managers among said plurality of service location managers (col. 11, lines 57-58 and col. 12, lines 3-17, Menditto discloses a directory within the content gateway which contains the address of servers that are capable of servicing the client request); and
- selecting said service location manager randomly from said record (col. 11, lines
 57-67, Menditto discloses selecting a server that best satisfy the client request).

As per claim **41**, Menditto discloses wherein said selecting said service location manager comprises:

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- maintaining a record comprising identifying information for a set of service
 location managers among said plurality of service location managers (col. 11,
 lines 57-58 and col. 12, lines 3-17, Menditto discloses a directory within the
 content gateway which contains the address of servers that are capable of
 servicing the client request); and
- selecting said service location manager in a round robin manner from said record (col. 11, lines 57-67 and col. 13, lines 27-35, Menditto discloses selecting a server that best satisfy the client request).

As per claim 42, Menditto discloses:

 wherein said selecting said service location manager comprises a comparison of processing loads of at least two service location managers among said plurality of service location managers (col. 3, lines 51-61, Menditto discloses selecting a server to process the request by determining the load on each server).

As per claim 43, Menditto discloses:

• wherein said selecting said service location manager comprises a comparison of available resources of a first set of service providers supervised by said service location manager and available resources of a second set of service providers supervised by a second service location manager (col. 4, lines 61-67 and col. 4, lines 1-8, Menditto discloses determining which of the content providers have the information resources before selecting a server to handle the client request).

As per claim 44, Menditto discloses:

wherein said selecting said service location manager is based on an estimate of
a network communication condition between two entities connected by the
network (col. 3, lines 62-67 and col. 4, lines 1-17, Menditto discloses selecting a
server that is closer to the client terminal to handle the request).

As per claim 45, Menditto discloses:

 wherein said estimate of said network communication condition is associated with said client (col. 3, lines 62-67 and col. 4, lines 1-17, Menditto discloses selecting a server that is closer to the client terminal to handle the request).

As per claim **46**, Menditto discloses the invention substantially as claims discussed above.

However, Menditto does not explicitly disclose:

wherein said estimate of said network communication condition is associated
 with a content source of said streaming media.

Hospodor discloses a system for servicing streaming media request comprising:

wherein said estimate of said network communication condition is associated
with a content source of said streaming media (paragraph 0026, Hospodor
discloses a stream director node determining if there is sufficient resources
available on the stream engine node to service the request).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time

the invention was made to modify Menditto by determining the available resources

located on the service provider (i.e. stream engine node) in order to service the request

by the requestor for the purpose of providing streaming content to a requestor while

meeting quality of service constraints [paragraph 0003].

As per claim 47, Menditto discloses wherein said selecting said service location

manager is based on one of the group consisting of:

pending service application request queue length of a service location manager,

expected latency of a service location manager for assigning said service

request, and available network communication bandwidth of a service location

manager (col. 15, lines 25-34, Menditto discloses selecting service node based

on bandwidth allocation).

As per claim 48, Menditto discloses the invention substantially as claims discussed

above.

However, Menditto does not explicitly disclose:

notifying a second service location manager among said plurality of service

location managers of the assignment of said service provider to perform said

media service component.

Hospodor discloses a system for servicing streaming media request comprising:

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notifying a second service location manager among said plurality of service
location managers of the assignment of said service provider to perform said
media service component (paragraphs 0026-0028 and 0036, Hospodor
discloses a stream director node that assigns a stream engine node to service
the streaming media request from the client).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Menditto by incorporating or implementing servicing and assigning streaming media requests to a particular service provider (i.e. stream engine node) for the purpose of providing streaming content to a requestor while meeting quality of service constraints [paragraph 0003].

As per claim **49**, Menditto discloses the invention substantially as claims discussed above.

However, Menditto does not explicitly disclose:

 notifying a second service location manager among said plurality of service location managers of the completion of performance of said media service component.

Hospodor discloses a system for servicing streaming media request comprising:

 notifying a second service location manager among said plurality of service location managers of the completion of performance of said media service component (paragraphs 0026-0028 and 0036, Hospodor discloses a stream

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director node that assigns a stream engine node to service the streaming media request from the client).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Menditto by incorporating or implementing servicing and assigning streaming media requests to a particular service provider (i.e. stream engine node) for the purpose of providing streaming content to a requestor while meeting quality of service constraints [paragraph 0003].

As per claim 50, Menditto discloses:

 a second service location manager assuming the role of said service location manager if said service location manager is determined to be non-responsive (col. 2, lines 53-67).

As per claim **51**, Menditto further discloses:

• maintaining a record comprising identifying information of a set of service location managers among said plurality of service location managers, each service location manager of said set of service location managers supervising said service provider (col. 11, lines 57-58 and col. 12, lines 3-17, Menditto discloses a directory within the content gateway which contains the address of servers that are capable of servicing the client request).

However, Menditto does not explicitly disclose:

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notifying said set of service location managers according to said record of said

assignment of said service provider to perform said media service component.

Hospodor discloses a system for servicing streaming media request comprising:

notifying said set of service location managers according to said record of said

assignment of said service provider to perform said media service component

(paragraphs 0026-0028 and 0036, Hospodor discloses a stream director node

that assigns a stream engine node to service the streaming media request from

the client).

Therefore, it would have been obvious to one of ordinary skill in the art at the time

the invention was made to modify Menditto by incorporating or implementing servicing

and assigning streaming media requests to a particular service provider (i.e. stream

engine node) for the purpose of providing streaming content to a requestor while

meeting quality of service constraints [paragraph 0003].

As per claim **52**, Menditto discloses:

wherein said maintaining and said notifying is performed by said service provider

or said service location manager (col. 11, lines 57-58 and col. 12, lines 3-17,

Menditto discloses a directory within the content gateway which contains the

address of servers that are capable of servicing the client request).

As per claim **53**, Menditto further discloses:

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maintaining a record comprising identifying information of a set of service location managers among said plurality of service location managers, each service location manager of said set of service location managers supervising said service provider (col. 11, lines 57-58 and col. 12, lines 3-17, Menditto discloses a directory within the content gateway which contains the address of servers that are capable of servicing the client request).

However, Menditto does not explicitly disclose:

 notifying said set of service location managers according to said record of the completion of performance of said media service component by said service provider.

Hospodor discloses a system for servicing streaming media request comprising:

notifying said set of service location managers according to said record of the
completion of performance of said media service component by said service
provider (paragraphs 0026-0028 and 0036, Hospodor discloses a stream
director node that assigns a stream engine node to service the streaming media
request from the client).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Menditto by incorporating or implementing servicing and assigning streaming media requests to a particular service provider (i.e. stream engine node) for the purpose of providing streaming content to a requestor while meeting quality of service constraints [paragraph 0003].

As per claim 54, Menditto discloses:

wherein said maintaining and said notifying is performed by said service provider
or said service location manager (col. 3, lines 11-17 and lines 40-61, Menditto
discloses a content gateway that locates the best server to service the content

As per claim **55**, Menditto discloses:

request from the client terminal).

wherein said service provider is supervised by more than one service location
manager among said plurality of service location managers (col. 11, lines 57-58
and col. 12, lines 3-17, Menditto discloses a directory within the content gateway
which contains the address of servers that are capable of servicing the client
request).

As per claim **56**, Menditto discloses a system for providing streaming content to a client device, said system comprising:

- a plurality of service location managers (col. 2, lines 54-55);
- a plurality of service providers (col. 2, lines 54-55),

However, Menditto does not explicitly disclose:

- each service provider capable of performing a service on an item of streaming input content to produce said streaming content; and
- a portal providing a first point of contact for said client device, said portal for
 receiving from said client device a request for performance of said service on an

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item of streaming input content, said portal for selecting a service location manager to which to provide said request from said plurality of service location managers, said service location manager for receiving said request from said portal and for selecting a service provider from said plurality of service providers and informing said service provider of said assignment to perform said service on said streaming input content to produce said streaming content.

Hospodor discloses a system for servicing streaming media request comprising:

- each service provider capable of performing a service on an item of streaming input content to produce said streaming content (paragraphs 0012, 0014 and 0026, Hospodor discloses receiving a streaming media request); and
- a portal providing a first point of contact for said client device, said portal for receiving from said client device a request for performance of said service on an item of streaming input content, said portal for selecting a service location manager to which to provide said request from said plurality of service location managers, said service location manager for receiving said request from said portal and for selecting a service provider from said plurality of service providers and informing said service provider (i.e. stream engine node) of said assignment to perform said service on said streaming input content to produce said streaming content (paragraphs 0026-0028 and 0036, Hospodor discloses a stream director node that assigns and selecting a stream engine node to service the streaming media request from the client).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Menditto by incorporating or implementing servicing and assigning streaming media requests to a particular service provider (i.e. stream engine node) for the purpose of providing streaming content to a requestor while meeting quality of service constraints [paragraph 0003].

As per claim 57, Menditto discloses:

wherein said portal maintains a record comprising a prioritized listing of at least one service location manager among said plurality of service location managers and selects said service location manager in order of priority according to said prioritized listing (col. 11, lines 57-58 and col. 12, lines 3-17, Menditto discloses a directory within the content gateway which contains a list of server addresses that are capable of servicing the client request).

As per claim **58**, Menditto discloses:

wherein said portal maintains a record comprising identifying information of a set of service location managers among said plurality of service location managers and selects said service location manager in a round robin manner from said record (col. 11, lines 57-58 and col. 12, lines 3-17, Menditto discloses a directory within the content gateway which contains a list of server addresses that are capable of servicing the client request).

As per claim 59, Menditto discloses:

wherein said portal selects said service location manager by comparing
processing loads of at least two service location managers among said plurality
of service location managers (col. 3, lines 51-61, Menditto discloses selecting a
server to process the request by determining the load on each server).

As per claim 60, Menditto discloses:

wherein said portal selects said service location manager by comparing available resources of a first set of service providers supervised by said service location manager and available resources of a second set of service providers supervised by a second service location manager (col. 4, lines 61-67 and col. 4, lines 1-8, Menditto discloses determining which of the content providers have the information resources before selecting a server to handle the client request).

As per claim 61, Menditto discloses:

wherein said portal selects said service location manager based on an estimate
of a network communication condition between two entities connected by the
network (col. 3, lines 62-67 and col. 4, lines 1-17, Menditto discloses selecting a
server that is closer to the client terminal to handle the request).

As per claim **62**, discloses Menditto discloses the invention substantially as claims discussed above.

However, Menditto does not explicitly disclose:

wherein said service location manager notifies a second service location
 manager among said plurality of service location managers of said assignment of
 said service provider to perform said service.

Hospodor discloses a system for servicing streaming media request comprising:

wherein said service location manager notifies a second service location
manager among said plurality of service location managers of said assignment
of said service provider to perform said service (paragraphs 0026-0028 and
0036, Hospodor discloses a stream director node that assigns a stream engine
node to service the streaming media request from the client).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Menditto by incorporating or implementing servicing and assigning streaming media requests to a particular service provider (i.e. stream engine node) for the purpose of providing streaming content to a requestor while meeting quality of service constraints [paragraph 0003].

As per claim **63**, Menditto discloses:

 wherein said portal determines if said service location manager of said plurality of service location managers is non-responsive (col. 2, lines 53-67).

As per claim 64, Menditto discloses:

wherein said portal activates a second service location manager of said plurality
of service location managers to assume the role of said service location
manager, provided said portal determines said service location manager to be
non-responsive (col. 2, lines 53-67).

As per claim 65, Menditto discloses:

• wherein said service provider is supervised by more than one service location manager of said plurality of service location managers (col. 4, lines 61-67 and col. 4, lines 1-8, Menditto discloses determining which of the content providers have the information resources before selecting a server to handle the client request).

As per claim 66, Menditto discloses:

wherein said service provider maintains a record comprising identifying
information of service location managers that supervise it (col. 11, lines 57-58
and col. 12, lines 3-17, Menditto discloses a directory within the content gateway
which contains a list of server addresses that are capable of servicing the client
request).

As per claim 67, Menditto discloses the invention substantially as claims discussed above.

However, Menditto does not explicitly disclose:

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 wherein said service provider notifies said service location managers that supervise it of said assignment to perform said service.

Hospodor discloses a system for servicing streaming media request comprising:

 wherein said service provider notifies said service location managers that supervise it of said assignment to perform said service (paragraphs 0026-0028 and 0036, Hospodor discloses a stream director node that assigns a stream engine node to service the streaming media request from the client).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Menditto by incorporating or implementing servicing and assigning streaming media requests to a particular service provider (i.e. stream engine node) for the purpose of providing streaming content to a requestor while meeting quality of service constraints [paragraph 0003].

As per claim **68**, Menditto discloses the invention substantially as claims discussed above.

However, Menditto does not explicitly disclose:

 wherein said service provider notifies said service location managers that supervise it of completion of performance of said service by said service provider.

Hospodor discloses a system for servicing streaming media request comprising:

 wherein said service provider notifies said service location managers that supervise it of completion of performance of said service by said service Application/Control (4dinber: 10/000, 18

provider (paragraphs 0026-0028 and 0036, Hospodor discloses a stream director node that assigns a stream engine node to service the streaming media request from the client).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Menditto by incorporating or implementing servicing and assigning streaming media requests to a particular service provider (i.e. stream engine node) for the purpose of providing streaming content to a requestor while meeting quality of service constraints [paragraph 0003].

As per claim 69, Menditto discloses:

 wherein said service location manager maintains a record comprising identifying information of a second service location manager that also supervises said service provider (col. 11, lines 57-58 and col. 12, lines 3-17).

As per claim **70**, Menditto discloses the invention substantially as claims discussed above.

However, Menditto does not explicitly disclose:

wherein said service location manager notifies said second service location
 manager of said assignment of said service provider to perform said service.

Hospodor discloses a system for servicing streaming media request comprising:

wherein said service location manager notifies said second service location
 manager of said assignment of said service provider to perform said service

(paragraphs 0026-0028 and 0036, Hospodor discloses a stream director node that assigns a stream engine node to service the streaming media request from the client).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Menditto by incorporating or implementing servicing and assigning streaming media requests to a particular service provider (i.e. stream engine node) for the purpose of providing streaming content to a requestor while meeting quality of service constraints [paragraph 0003].

As per claim **71**, Menditto discloses the invention substantially as claims discussed above.

However, Menditto does not explicitly disclose:

- wherein said service location manager notifies said second service location
 manager of completion of performance of said service by said service provider.
- Hospodor discloses a system for servicing streaming media request comprising:
 - wherein said service location manager notifies said second service location
 manager of completion of performance of said service by said service provider
 (paragraphs 0026-0028 and 0036, Hospodor discloses a stream director node
 that assigns a stream engine node to service the streaming media request from
 the client).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Menditto by incorporating or implementing servicing

and assigning streaming media requests to a particular service provider (i.e. stream engine node) for the purpose of providing streaming content to a requestor while meeting quality of service constraints [paragraph 0003].

As per claim 72, Menditto discloses:

 wherein said service provider is supervised by a first service location manager, and said first service location manager transfers supervision of said service provider to a second service location manager (col. 11, lines 57-58 and col. 12, lines 3-17).

As per claim 73, Menditto discloses:

 wherein said transfer is based on a computational load of said first service location manager (col. 3, lines 51-61, Menditto discloses selecting a server to process the request by determining the load on each server).

As per claim 74, Menditto discloses:

 wherein said transfer is based on availability of resources of a service provider supervised by said second service location manager (col. 11, lines 57-58 and col. 12, lines 3-17).

As per claim 75, Menditto discloses:

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wherein said service provider is selected to be supervised by said service location manager based on a network communication condition between said service location manager and said service provider (col. 3, lines 62-67 and col. 4, lines 1-17).

As per claim 76, Menditto discloses:

wherein said plurality of service location managers comprises a master service location manager that monitors the status of other service location managers of said plurality of service location managers (col. 3, lines 62-67 and col. 4, lines 1-17.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara N. Burgess whose telephone number is (571) 272-3996. The examiner can normally be reached on M-F (8:00am-4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Ettinene can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

> Barbara N Burgess Examiner Art Unit 2157

November 7, 2007